

P.B.5818 - Patentlaan 2 2280 HV Rijswijk (ZH) ☎ (070) 3 40 20 40 FAX (070) 3 40 30 16 Europäisches Patentamt European Patent Office des brevets

Generaldirektion 1

Directorate General 1

Direction générale 1

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<i></i>	12 Jan, 2 FRIST TERM EINGANG - R		Date 11.01.06
Reference EP 25512-034/zp		Application No./Patent No. 02023604.8 - 2218	
Applicant/Proprietor MICROSOFT COR	PORATION		

#### COMMUNICATION

The European Patent Office herewith transmits as an enclosure the European search report (under R. 44 or R. 45 EPC) for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

The following specifications given by the applicant have been approved by the Search Division:

☑ Titl

The abstract was modified by the Search Division and the definitive text is attached to this communication.

The following figure will be published together with the abstract: 1

#### Refund of search fee

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.



## **EUROPEAN SEARCH REPORT**

Application Number EP 02 02 3604

		DOCUMENTS CONSID	ERED TO BE	RELEVANT				
	Category	Citation of document with of relevant pas	Relevant to daim	CLASSIFICATION OF THE APPLICATION (IPC)				
(A)	x 🗸	WO 99/52080 A (SYN/ 14 October 1999 (19 * page 8, line 28 - * page 31, line 14 * page 33, line 10 * page 42, line 10	999-10-14) - line 33 * - line 28 * - line 21 *	1-75, 77-107	G06T1/00			
(1)	X ✓	DYNAMIC VIRTUAL ENVIOLENTERNATIONAL JOURNIE IPI PRESS, COLORADO	N: 1081-1451					
3	X ✓	RIKK CAREY, GAVIN E "international star 1997 virtual realit (vrm197)" VRML 97, 1997, page page 7, paragraph 3 section 6.20; page	ndard iso/iec by modeling la es 1-236, XPO 3.18; pages 89	14772-1: anguage 02133320 9-93,	29-75, 77-93, 99-107	TECHNICAL FIELDS SEARCHED (IPC) GO6T		
(C)	X 🗸	WO 99/00725 A (SUN 7 January 1999 (199 * abstract *		, INC)	1-28, 94-98			
<b>(5)</b>	X 🗸	US 6 266 053 B1 (FR 24 July 2001 (2001- * column 5, line 26 * column 4, line 49 * column 5, lines 5 * column 14, line 1	1-75, 77-107					
©	x ✓	US 6 154 215 A (HOF 28 November 2000 (2 * columns 1,2 *		_	1-28, 94-98			
				-/				
6		The present search report has						
ê		Place of search Berlin		cember 2005	Kui	exeminer ak, E		
70 (PO	C	ATEGORY OF CITED DOCUMENTS		T : theory or principle	underlying the t	nvention		
2 FORM 1503 03.82 (P04C01)	Y : parti docu A : tech O : non-	cularly relevant if taken alone cularly relevant if combined with and ment of the same category nological background -written disclosure	ther	E : earlier patent docs after the filing date D : document cited to L : document cited to & : member of the sa	ument, but publise the application office reasons	shed on, ar		
EPO .		mediate document		document	peatin taning	, wneskrings		



## **EUROPEAN SEARCH REPORT**

Application Number EP 02 02 3604

	DOCUMENTS CONSID	ERED TO BE RELEVANT		
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	The present search report has	been drawn up for all claims		
<del> </del>	Place of search	Date of completion of the search		Examiner
	Berlin	30 December 200	)5 Ku1	ak, E
X: part Y: part doc: A: tech O: non	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with another of the same category under the same category unological background —written disclosure mediate document	E : earlier palent after the filling ther D : document cite L : document cite	ed in the application of for other reasons	shed on, or

## ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 02 02 3604

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

30-12-2005

	Publication date		Patent family member(s)		Publication date
A	14-10-1999	AU	3207299	A	25-10-1999
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B1	10-04-2001	NONE			
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P.B.5818 - Palentiaan 2 2250 HV Flijswijk (ZH) 22 (070) 3 40 20 40

**ALLEMAGNE** 

Europäisches Patentamt

European **Patent Office** 

Office européen des brevets

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18 Nov. 2005

FRIST TERM

EINGANG - RECEIVED

**EPO Customer Services** 

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Date

04-11-2005

Application No./Patent No. Reference 02023604.8 - 2218 EP 25512-034/zp PCT/ Applicant/Proprietor

MICROSOFT CORPORATION

#### COMMUNICATION

The European Patent Office herewith transmits the partial European search report under Rule 46(1) EPC relating to the above-mentioned European patent application.

Copies of the documents cited in the search report are enclosed.

The applicant's attention is drawn to the following:

The Search Division informs the applicant that if the European search report is also to cover inventions other than the invention first mentioned in the claims, a further search fee must be paid for each of these inventions, within one month after notification of this communication.

If the application has been filed up to 30 June 1999, the search fee in force before 01 July 1999 (EUR 869,--) or the equivalent applicable on the date of payment is payable. This applies also to the search fees requested under Rule 46(1) EPC. See also OJ EPO 06/1999, 405.

The abstract was modified by the Search Division and the definitive text is attached to the present communication.

Additional set(s) of copies of the documents cited in the European search report is (are) enclosed  $\square$ as well.

#### Note to users of the automatic debiting procedure:

Unless the EPO receives prior instructions to the contrary, the search fee(s) will be debited on the last day of the period for payment. For further details see the Arrangements for the automatic debiting procedure, Supplement 2 to OJ EPO 01/2005.





## PARTIAL EUROPEAN SEARCH REPORT

**Application Number** 

under Rule 46, paragraph 1 of the European Patent EP  $\,02\,\,02\,\,3604$  Convention

	DOCUMENTS CONSID	ERED TO BE RELEVANT			
Category	Citation of decument with in of relevant pass	dication, where appropriate, ages	nere appropriate, Relevant to claim		
X	HYUN SUK KIM ET AL: DYNAMIC VIRTUAL ENVINTERNATIONAL JOURN, IPI PRESS, COLORADO vol. 4, no. 2, 2000 XP001039706 ISSN: 1081-1451 * page 16, column 2	IRONMENT: SPANGRAPH" AL OF VIRTUAL REALITY, SPRINGS, CO, US, , pages 12-18,	1-28, 94-98	G06T1/00	
. X 🗸	WO 99/00725 A (SUN ! 7 January 1999 (1999 * abstract *	MICROSYSTEMS, INC) 9-01-07)	1-28, 94-98		
, x 🗸	24 July 2001 (2001-0	ENCH MICHAEL T ET AL) 07-24) - column 6, line 5 *	1-28, 94-98		
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LACK	OF UNITY OF INVENTI	ON	<u> </u>		
the require	ements of unity of invention and relates	uropean patent application does not complete severalinventions or groups of invention	, s		
The preser	nt partial European search report has t illication which relate to the invention fr	een drawn up forthose parts of the Europe st mentioned in the claims. Cate of completion of the search	an	Examiner	
	Berlin	19 October 2005	Kula	ak, E	
X : parti Y : parti docu A : lechr	ATEGORY OF CITED DOCUMENTS cularly relevant if taken alone cularly relevant if combined with another ment of the same category nological background written disclosure	E : eadier patent do after the filing da er D : document cited t L : document cited t	T: theory or principle underlying the invention E: earlier patent document, but published on, or after the fiting date D: document cited in the application L: document cited for other reasons		
P: interi					

# LACK OF UNITY OF INVENTION SHEET B

Application Number EP 02 02 3604

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-28,94-98

Changing a visual scene graph data structure by atomic operations

2. claims: 29-48

Changing and maintaining a scene graph data without external reference.

3. claims: 49-64

Determining and maintaining a scene graph data which does not require an external reference.

4. claims: 65-70,102-107

A cache structure which maintains visual information in containers in a format independent of receiving entity and a renderer component which traverse the cache to produce processed data in a format to be understood by the receiving entity.

5. claims: 71-75,77-81

Marking an invalid container in a cache structure.

6. claims: 82-93,99-101

Reserving an invalid container in a visual information cache structure and determining whether the graphics information of the invalid container is needed and if so, outputting the data.

## ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 02 02 3604

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

19-10-2005

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WO 9952080	Α	14-10-1999	AU US US	3207299 6266053 2002032697	B1	25-10-1999 24-07-2001 14-03-2002